



Monitoring/Water Quality Improvements Committee Meeting

12/16/2021 11:00 am Virtual Meeting

Minutes

1. Call to Order

Chair Waters called the meeting to order at 11:00 AM.

2. Roll Call

Prusila performed the roll call. Members present: Chair Steve Waters, Alana Bartolai, Al Giertych, Joel Sensenig, Nick Huber, Brian Kuebker, (Arrived 11:15), Rosemary Heilemann, (Arrived 11:03).
Members Absent: None

Others Present: Rob Flood, Mike Prusila, Jacob Jozefowski, Tom Morthorst, Chuck Bodden, Ashley Strelcheck, Carrie Carter, Mark Keiser, Mia Gerace, Mike Foster, Andrew Fang, Rishab Mahajan

3. Public Comment

There was no public comment.

4. Approval of Meeting Minutes

a. 10/21/21 Monitoring/Water Quality Improvements Committee Meeting Minutes

Motion by Giertych, second by Sensenig to approve as presented. AYES: Waters, Bartolai, Giertych, Sensenig, Huber, NAYS: None. Motion passed 5-0.

b. 11/19/21 Special Call Monitoring/Water Quality Improvements Committee Meeting Minutes

Motion by Sensenig, second by Heilemann to approve as presented. AYES: Waters, Sensenig, Huber, Heilemann, NAYS: None, ABSTAIN: Bartolai, Giertych. Motion passed 4-0-2.

5. Old Business

a. Monitoring Updates

Flood reported that North Shore Water Reclamation District is performing continuous monitoring and has had no QC violations in last 3 months or missing data, the data should be submitted to Lake County Health Department tomorrow. They will be watching the Des Plaines River at Russell Rd. site and will remove the sonde when the river freezes. The Des Plaines River sonde stations at IL 120 & IL 22 never freeze.

Bartolai reported no major updates on water quality/chemistry monitoring, which ended for 2021 in September and will resume in February 2022. She reminded the committee that no samples are collected when a site is frozen or there is no flow. She will keep the group posted how this affects sites when monitoring resumes.

b. MBI FY21 Contract Extension Request

Motion to recommend extension of contract to March 31, 2022 to the Executive Board by Heilemann, second by Huber. AYES: Waters, Bartolai, Giertych, Sensenig, Huber, Heilemann, NAYS: None. Motion passed 6-0.

c. MBI 2022-2023 Draft Contract Review

Waters reported following the November Special Call meeting, he and Flood discussed with MBI the inclusion of continuous sonde data collected by North Shore Water Reclamation District. Flood noted they are collecting several parameters over longer time periods at three sites. MBI was asked to include this data but needed to revise scope and price. MBI added Item 5A with a price of \$8400 to the previous scope reviewed in November. Flood noted this amounts to analysis of about 2.5 years of data with thousands and thousands of data points to analyze plus data to be collected in 2022.

Bartolai asked if MBI indicated what the analysis would look like? Flood responded that they will add data to the Integrated Prioritization System model and compare to the SNAP table. There was a concern with data gathered by MBI that the results may be questionable due to short length of deployment. This will be much more robust.

Mahajan asked if MBI is incorporating water quality data into IPS and SNAP? Flood affirmed that is what has been done in the past.

Motion to recommend approval of MBI 2022 contract to the Executive Board by Heilemann, second by Bartolai. AYES: Waters, Bartolai, Giertych, Sensenig, Huber, Kuebker, Heilemann, NAYS: None. Motion passed 7-0

d. IPS Model Training - DRWW Representatives

Strelcheck reported that Bartolai, Adam, Sensenig, Waters & Bodden (NSWRD) along with Mahajan and Karoline Qasem from Geosyntec will participate in the IPS Model Training conducted by MBI. Strelcheck will bring the list of representatives to DRSCW to confirm the number.

6. New Business

a. DRWW 2022 Meeting Schedule

The meeting schedule was presented, Heilemann commented it may be desirable to move back to 1:00 if the meetings go back to in-person/live.

b. Geosyntec NARP Watershed Modeling and Calibration

Mike Foster, Keiser & Assoc. presented the watershed hydrologic model and calibration to be used in development of the NARP. Hydrologic calibration was performed first, then water quality calibration. 2011-12 was used as the model initialization period, 2013-15 the calibration period, and 2016-18 the validation period. The most important calibration point is at the model outlet near Des Plaines, but uses 4 calibration points total that correspond to USGS stations (Des Plaines R. at Russell Rd.; Mill Creek at Hunt Club Rd.; Des Plaines R. at IL 120; and Des Plaines R. near Des Plaines). Goodness of fit coefficient (NSE) of 0.5 is the minimum acceptable, modelers like to see 0.65-0.8 for large urban watershed, with NSE of 1.0 perfect. Russell fit well (NSE ~0.7). Mill Creek was the most challenging calibration point (NSE 0.6 calibration, 0.49 validation), Gurnee (0.75 calibration, 0.78 validation) and Outlet (0.733 calibration, 0.778

validation) both displayed good fitness, exceeding the target. Water quality calibration was not as extensive, but the model will be handed over to Geosyntec for water quality analysis. Model correlation for Total Phosphorus improves downstream. Sensitivity analysis examined the effect of changing variables in the model on the model output. Channel roughness was important throughout model, curve number was important at the Mill Creek & Russell Rd. calibration points. Next steps include final reviews with Geosyntec, run various scenarios, and write up model documentation.

Waters asked what is the timing on next steps? Foster replied that final files and documentation will be sent to Geosyntec by the end of the month (December). Mahajan noted that Geosyntec will be working on the instream model next year and have already begun development of this model. It will be important to point out to IL EPA that point sources are reducing over time (according to model).

Waters asked to add model development and discussion to the annual report next year

c. Presentation Topics Needed: February 17, 2022 DRWW General Membership Meeting

The committee was asked if there are any presentation topic ideas for the February general membership meeting and if so those can be sent to Prusila or Strelcheck. Heilemann mentioned the Des Plaines River watershed plan implementation & projects SMC is implementing.

7. Member Comments

None

8. Next Monitoring/Water Quality Improvements Committee Meeting January 20, 2022 at 11:00 am

9. Adjournment

Motion by Sensenig, second by Huber to adjourn. AYES: Waters, Bartolai, Sensenig, Huber, Kuebker, Heilemann, NAYS: None. Motion passed 6-0

Meeting adjourned at 12:02 PM.